

IN THE CLAIMS

Claims 1-7 (canceled)

B² 8. (currently amended) An indexible cutting insert having a polygonal shape and including an upper surface, a lower surface, and an edge surface structure interconnecting the upper and lower surfaces; an intersection between the edge surface structure and the top surface forming: a main cutting edge, a secondary cutting edge, and a curved corner region disposed between the main and secondary cutting edges; the corner region including a radial edge and a corner edge of mutually different radii of curvature, wherein the radial edge and the secondary cutting edge are disposed on a first side of a bisector of the corner region, and the corner edge and the main cutting edge are located on a second side of the bisector; a radius of curvature of the radial edge being at least five times larger than a radius of curvature of the curved edge; the ~~top~~ upper surface including an edge-reinforcing land extending along the radial edge and the curved edge, a portion of the land extending along the radial edge being of smaller width than a portion of the land extending along the curved edge; the upper surface further including a first downwardly sloping portion extending from the land and extending to a central floor portion of the upper surface; and a chip former depression formed in the sloping portion adjacent the corner region of the insert and spaced inwardly from the land, the chip breaker including a second downwardly sloping portion, wherein an angle of inclination of the first sloping portion being greater than an angle of inclination of the second sloping portion.

9. (previously presented) The insert according to claim 8 wherein the land further includes a portion extending along the secondary cutting edge and being of the same width as the portion of the land extending along the curved edge.

10. (previously presented) The insert according to claim 8 wherein the width of the land portion extending along the radial edge is 50-70% of the width of the land portion extending along the curved edge.

Claim 11 (canceled)

Claim 12 (canceled)

Claim 13 (canceled)

14. (currently amended) The insert according to claim ~~13~~ 17 wherein the bisector intersects the secondary edge portion substantially at a midpoint thereof.

β²
cont 15. (new) An indexible cutting insert having a polygonal shape and including an upper surface, a lower surface, and an edge surface structure interconnecting the upper and lower surfaces; an intersection between the edge surface structure and the top surface forming: a main cutting edge, a secondary cutting edge, and a curved corner region disposed between the main and secondary cutting edges; the corner region including a radial edge and a corner edge of mutually different radii of curvature, wherein the radial edge and the secondary cutting edge are disposed on a first side of a bisector of the corner region, and the corner edge and the main cutting edge are located on a second side of the bisector; a radius of curvature of the radial edge being at least five times larger than a radius of curvature of the curved edge; the upper surface including an edge-reinforcing land extending along the radial edge and the curved edge, a portion of the land extending along the radial edge being of smaller width than a portion of the land extending along the curved edge; wherein the land further includes a portion extending along the secondary cutting edge and being of the same width as the portion of the land extending along the curved edge.

B²
cont.

16. (new) An indexible cutting insert having a polygonal shape and including an upper surface, a lower surface, and an edge surface structure interconnecting the upper and lower surfaces; an intersection between the edge surface structure and the top surface forming: a main cutting edge, a secondary cutting edge, and a curved corner region disposed between the main and secondary cutting edges; the corner region including a radial edge and a corner edge of mutually different radii of curvature, wherein the radial edge and the secondary cutting edge are disposed on a first side of a bisector of the corner region, and the corner edge and the main cutting edge are located on a second side of the bisector; a radius of curvature of the radial edge being at least five times larger than a radius of curvature of the curved edge; the upper surface including an edge-reinforcing land extending along the radial edge and the curved edge, a portion of the land extending along the radial edge being of smaller width than a portion of the land extending along the curved edge; wherein the width of the land portion extending along the radial edge is 50-70% of the width of the land portion extending along the curved edge.

17. (new) An indexible cutting insert having a polygonal shape and including an upper surface, a lower surface, and an edge surface structure interconnecting the upper and lower surfaces; an intersection between the edge surface structure and the top surface forming: a main cutting edge, a secondary cutting edge, and a curved corner region disposed between the main and secondary cutting edges; the corner region including a radial edge and a corner edge of mutually different radii of curvature, wherein the radial edge and the secondary cutting edge are disposed on a first side of a bisector of the corner region, and the corner edge and the main cutting edge are located on a second side of the bisector; a radius of curvature of the radial edge being at least five times larger than a radius of curvature of the curved edge; the upper surface including an edge-reinforcing land extending along the radial edge and the curved edge, a portion of the land extending along the radial edge being of smaller width than a portion of the land extending along the curved edge; wherein the corner region includes a planar inclined surface that is recessed

B²
concl.
in relation to the radial edge and the curved edge, the planar inclined surface including generally sine-wave-shaped edge portions disposed on opposite sides of the bisector and generally converging outwardly away from a center of the insert; wherein the planar inclined surface further includes a substantially straight primary edge portion extending substantially parallel to the radial edge and situated on the same side of the corner bisector as the radial edge; wherein the planar inclined surface further includes a straight secondary edge portion intersected by the corner bisector and intersecting the primary edge portion to define an obtuse angle therewith.
